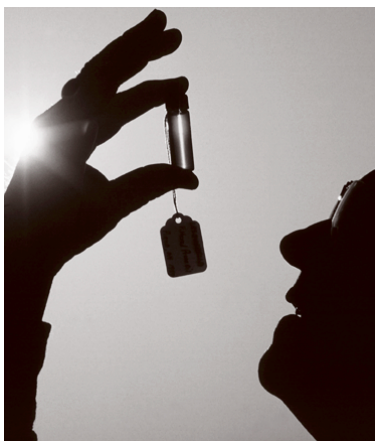
Bringing safer pesticides to California

THE DEPARTMENT HAS BEEN REGISTERING PESTICIDES SINCE 1921. In the last few years, we sharpened our focus to speed up approval of products that are more friendly to the environment and safer for the people who use them.

No pesticide can be licensed for use in California without an equivalent registration at the federal level, but we give priority to certain reduced-risk compounds. (These primarily are pesticides that U.S. EPA classifies as reduced risk, as well as microbial and biochemical products.) Our goal is to register these products in California at the same time that they receive federal registration. We make this possible by allowing manufacturers to apply for registration here in tandem with their federal application. Then we "workshare" the evaluation of health data with our U.S. EPA counterparts to determine if a product can be used safely. The Legislature appropriated funds for us to hire additional staff and focus on reduced-risk registrations. In 2001, 13 out of the 30 new active ingredients we registered were reduced risk.



The "worksharing" project is a team effort by DPR, U.S. EPA and IR-4 (a U.S. Department of Agriculture program that focuses on developing and registering pesticides for fruit, nut and vegetable crops). IR-4 provides residue data for crops, and DPR does the scientific reviews that let U.S. EPA establish the allowable residue level on fresh produce that makes it safe for human consumption. For the 12 months ending in June 2001, DPR completed work-ups that accounted for a third of U.S. EPA's workload of IR-4 tolerance requests. This was one factor that helped U.S. EPA to significantly shorten the time it took to register these pesticides — 18 months for reduced-risk pesticides compared with the 31-month average for all other pesticides. Making these reduced-risk pesticides available to farmers is critical for the California economy, since California agriculture is the world leader in the production of these crops. The next step will be for DPR to take on developing dietary risk evaluations for U.S.EPA. Our goal is to further reduce the time needed to register a reduced-risk product.

STREAMLINING THE REGISTRATION PROCESS

We put together a workgroup with key members of industry — the people who bring pesticides to market in California — to exchange ideas for using information technology to improve how we do business. Our goal is to make the registration process and Department priorities and decisions more understandable. Among other things, we're exploring how we can streamline operations with more use of electronic technology to receive and track submissions, obtain information, and make scientific evaluations.

We are also developing better ways to keep our registration "customers" in the loop on the status of the hundreds of registration packages moving through review and evaluation at any one time. In 2002, our Registration Branch will launch a program to automatically notify applicants of their product's current review status. New transactions will automatically trigger e-mail messages to applicants, detailing the status of their submissions.

4 FOR EXCELLENCE!

Four DPR staffers were among a group honored by U.S. EPA's Office of Pesticide Programs at ceremonies in Washington, D.C., in June 2001. Registration Branch Chief Barry Cortez, and Branch staff Jerry Campbell, Roberta Firoved, and Tom Leffingwell were recognized for their contribution to the worksharing project with an Excellence in Teamwork Award.

FUMIGANTS

Reducing the impact of fumigants

Measured in pounds, fumigants account for up to one-fourth of all agricultural pesticide use in California. Farmers use fumigants to control disease, weeds and pests in the soil before planting. Fumigants also are used for structural pest control and to protect stored commodities, such as grain. But these highly toxic gases may pose health and environmental hazards. One major fumigant — methyl bromide — contributes to ozone depletion. U.S. production of methyl bromide has been cut by 50 percent, and most uses will be eliminated in 2005 under federal law and international treaty. DPR and the County Agricultural Commissioners have begun a coordinated effort to assess fumigant hazards, reduce environmental impacts, and promote alternatives.

DPR has distributed more than $1.7 million to support the search for methyl bromide alternatives. We coordinated a $1 million legislative appropriation for university research. And since 1998, we've funded grants worth more than $800,000 for fruit, nut, and vegetable projects.

As the search for alternatives continues, we're completing a fumigant data checklist to assess hazards as we register new fumigants and renew existing products. These data will help us register replacements for methyl bromide while protecting workers, the public, and the environment. We're also working with the County Agricultural Commissioners, commodity groups and fumigant registrants to make sure that our regulatory efforts are based on sound science, reflect real-world conditions, and recognize critical needs.

During 2001, we obtained more air monitoring data for methyl bromide, 1,3-dichloropropene (1,3-D), metam-sodium breakdown products, and chloropicrin. Early in 2002, we will complete a data evaluation to confirm that our fumigant initiatives are working. These include new methyl bromide regulations that set minimum buffer zones; provide additional protection for workers, schoolchildren, and the public; and require advance notification of neighbors before fumigations begin.

REFINING OUR REGULATORY ACTIONS

While health and safety remain our top priorities, we opened a dialogue with industry early in 2001 to ensure that regulatory actions are not needlessly burdensome. That resulted in several positive developments:

- We expedited a technical change to methyl bromide regulations that allowed buffer zones to extend into roadways, making applications more efficient and reducing potential risks for fumigation workers.
- In time for the 2001 use season, we registered new 1,3-D formulations that allow drip irrigation applications, providing good pest management with lower rates of pesticide use.
- We reduced 1,3-D buffer zones from 300 to 100 feet after DPR staff reassessed exposures based on our review of new data.
- We refined calculations used to establish 1,3-D usage caps, which will allow increased allocations of the fumigant within a specific geographic area while maintaining acceptable risk levels.
- We began a general review of the procedures DPR uses to develop fumigant buffer zones.
- We're finalizing a risk assessment for metam-sodium under the Toxic Air Contaminant Program. Although metam-sodium is seen as a major alternative fumigant, permit conditions now vary from county to county. DPR wants to provide more scientific guidance to the County Agricultural Commissioners on issuing permits, while allowing an opportunity for stakeholder views.